REMARKS/ARGUMENTS

In the Final Office Action of October 11, 2006, the Patent Office examined claims 118-162, original claims 1-117 having been previously cancelled. In the Final Office Action, the Patent Office raised a 35 USC §112, second paragraph, objection to independent claims 118 and 140. In addition, the Patent Office rejected pending claims 118-125 and 135-139 under 35 USC §102, as being anticipated by *Cunningham*, U.S. Pat. No. 6,219,786, rejected claims 126-128, 140-152, and 159-162 under 35 USC § 103, as being obvious over Cunningham in view of *Esbensen*, U.S. Pat. No. 5,796,942, rejected claims 129-134 under 35 USC § 103, as being obvious over Cunningham in view of *Edgett*, [citation unknown], and claims 153-158 under 35 USC § 103, as being obvious over Cunningham in view of Esbensen and Edgett.

In response to the above objections and rejections, Applicant has amended independent claims 118 and 140, as well as a number of the dependent claims, which were necessary primarily due to the substantive amendments made to the independent claims. Claim 139 and 143 have been cancelled and no new claims have been added.

First, with regard to the Section 112 objection, Applicant has deleted the negative limitation in independent claims 118 and 140, which explained that the identifier upon which the present invention relies is "not an IP address." Although this is true and inherent from a plain reading of the specification, as would be appreciated by one skilled in the art, Applicant has voluntarily deleted this negative limitation from the claims, which should now render the Section 112 objection as moot.

With regard to the Section 102 and 103 rejections, all of which are based on Cunningham alone or in combination with other references, Applicant has amended independent claims 118 and 140 in such a manner that they now more clearly define the nature and scope of the present invention and in a manner that clearly distinguishes the present invention from the teachings of Cunningham alone or in combination with any known or cited art.

Specifically, Cunningham discloses and teaches a method and system for monitoring and controlling access to a network by *non-intrusively* monitoring network traffic. *See* Cunningham, Col. 6, lines 46-48 (emphasis added). Cunningham explains

that network access decisions can be made by intercepting and examining low level information that is contained in a conventional data packet, such as "(1) the Ethernet addresses of the source and destination nodes; (2) the IP addresses of the source and destination nodes; and (3) the IP port number of the destination node." *Id.* at Col. 7, lines 7-9. Cunningham also explains that more sophisticated network access decisions can be made by examining "higher level" information obtained from the data fields of such packets. Specifically, "the packets that are specific to a particular node-to-node transmission can be *collected* and *assembled*....The workstation then has the capability of piecing together the fragments of a multi-packet signal." *Id.* at Col. 7, lines 21-26 (emphasis added). Thus, "[h]igher level decisions can be formed *only* after a connection has been established and the *actual content* has begun to flow over that connection." *Id.* at Col. 8, lines 3-5 (emphasis added). Thus, Cunningham teaches how to make intelligent use of information that is already included in all conventional data packets, such as Ethernet addresses, IP addresses, and IP ports. Alternatively, Cunningham teaches how to make high level or more sophisticated decisions about network access by collecting and assembling a plurality of data packets in a communication stream and piecing together the user or application data that can only be obtained by assembling and analyzing a plurality of packets. In either case, Cunningham merely takes advantage of the standard information obtained from data packets that have been constructed by conventional Ethernet and TCP/IP communication software at the source node. Cunningham does not teach, disclose, or suggest the addition of any non-conventional or further information or identifiers into such data packets. In fact, to the contrary, Cunningham boasts that a "key point in the system and method is that the individual workstations 20 and 22 that are accessed by users can be managed without installing any software components specifically on those workstations." *Id.* at Col. 6, lines 8-12. Thus, Cunningham does not provide any mechanism for inserting any additional data into conventional data packets to create a modified data packet with additional information that can be used for tracking or network access purposes.

In stark contrast, the present invention discloses and specifically claims systems and methods that are intrusive upon conventional data packets and that enable network

access decisions to be made based on such "additional" information (i.e., "identifiers"), which are intrusively inserted into the headers of conventional data packets, for tracking, identification, and network access determination purposes. This approach allows additional information to be included in the header of a data packet while maintaining full compliance with the packet header standards and without altering the packet header format, so as not to disrupt normal packet processing at the destination node. Such additional information, such as a user identifier, is not otherwise available from headers in conventional data packets, which would include Ethernet addresses, IP addresses, and TCP port numbers. Although it might be possible to obtain similar information, such as a user identifier, through examination of the data payload of the data packets, such information is not consistently available and would typically only be obtainable by collecting and assembling multiple data packets. Further, although it might be possible to embed additional information in the data payload of the data packets, such information would be potentially disruptive to processing the data packets at the destination node. The present invention allows the insertion of such additional information into and extraction from the header of a single packet, without requiring the collection or assembly of data packets and without disrupting the processing of data packets at the destination node. Finally, such insertion of identifiers causes the data packet to be modified from its original state. Such modification is clearly intrusive and quite distinguishable from the teachings of Cunningham. In light of the claim amendments and remarks submitted herein, reliance upon Cunningham, as a Section 102 or 103 reference, is no longer warranted.

For example, amended independent claim 118 is directed to a method for intrusion prevention associated with a communication attempt between a source node and a destination node, comprising the steps of: after the construction of but before the sending of a data packet from the source node to the destination node as part of the communication attempt, intercepting the data packet at the source node; assigning one or more identifiers to the communication attempt, wherein the identifiers include at least one of a user identifier (UID) and a system identifier (SID), wherein the UID is associated with a specific authorized user of the source node who is identified as

initiating the communication attempt and wherein the SID is associated with computer hardware of the source node making the communication attempt; inserting the one or more identifiers assigned to the communication attempt into a header of the data packet to create a modified data packet; and, thereafter, intercepting the modified data packet within the computer network after it has been sent by the source node but before it reaches the destination node; extracting the one or more identifiers from the header of the modified data packet; and permitting the communication attempt by the source node with the destination node as a function of the one or more identifiers extracted from the header of the modified data packet.

Similarly, amended independent claim 140 is directed to a method of monitoring an electronic communication between a source node and a destination node within a computer network, comprising the steps of: after the construction of but before the sending of a data packet from the source node to the destination node as part of the electronic communication, intercepting the data packet at the source node; assigning one or more identifiers to the electronic communication; inserting the one or more identifiers assigned to the electronic communication into a header of the data packet to create a modified data packet; and intercepting the modified data packet within the computer network after it has been sent by the source node but before it reaches the destination node; extracting the one or more identifiers from the header of the modified data packet; and, thereafter, logging the one or more identifiers extracted from the header of the modified data packet in a database; and forwarding the modified data packet to the destination node.

As stated above, it is respectfully submitted that Cunningham does not teach, suggest, or make obvious the steps of, after the construction of but before the sending of a data packet from the source node to the destination node as part of the electronic communication, intercepting the data packet at the source node, assigning one or more identifiers, and inserting the one or more identifiers assigned to the electronic communication into a header of the data packet to create a modified data packet.

Thus, for at least the above reasons, independent claims 118 and 140 define over the art cited by the Patent Office to date, including Cunningham, whether considered

alone or in combination with any of the other art known or cited. For these reasons, independent claims 118 and 140, and all of their dependent claims, now stand in condition for allowance.

CONCLUSION

It is respectfully submitted that currently presented claims 118-138, 140-142 and 144-162, as amended, are not anticipated by or rendered obvious by any of the art cited by the Patent Office to date, including Cunningham, whether considered alone or in combination with any of the other art cited. For these reasons, Applicant respectfully submits that amended claims 118-138, 140-142 and 144-162 define over the prior art and, thus, stand in condition for allowance, which action is earnestly solicited.

This communication is responsive to the Final Office Action mailed on October 11, 2006, and is filed in conjunction with a Request for Continued Examination (RCE). The appropriate RCE fee is included herewith. Since no extensions of time are due and since no new claims have been added, it is respectfully submitted that, other than the RCE fee, no additional fees are currently due or owing. However, if our assessment is in error, please charge any fees that might be due or credit any overpayment to our Deposit Account No. 50-3537.

Respectfully submitted by
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On behalf of the Applicant

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